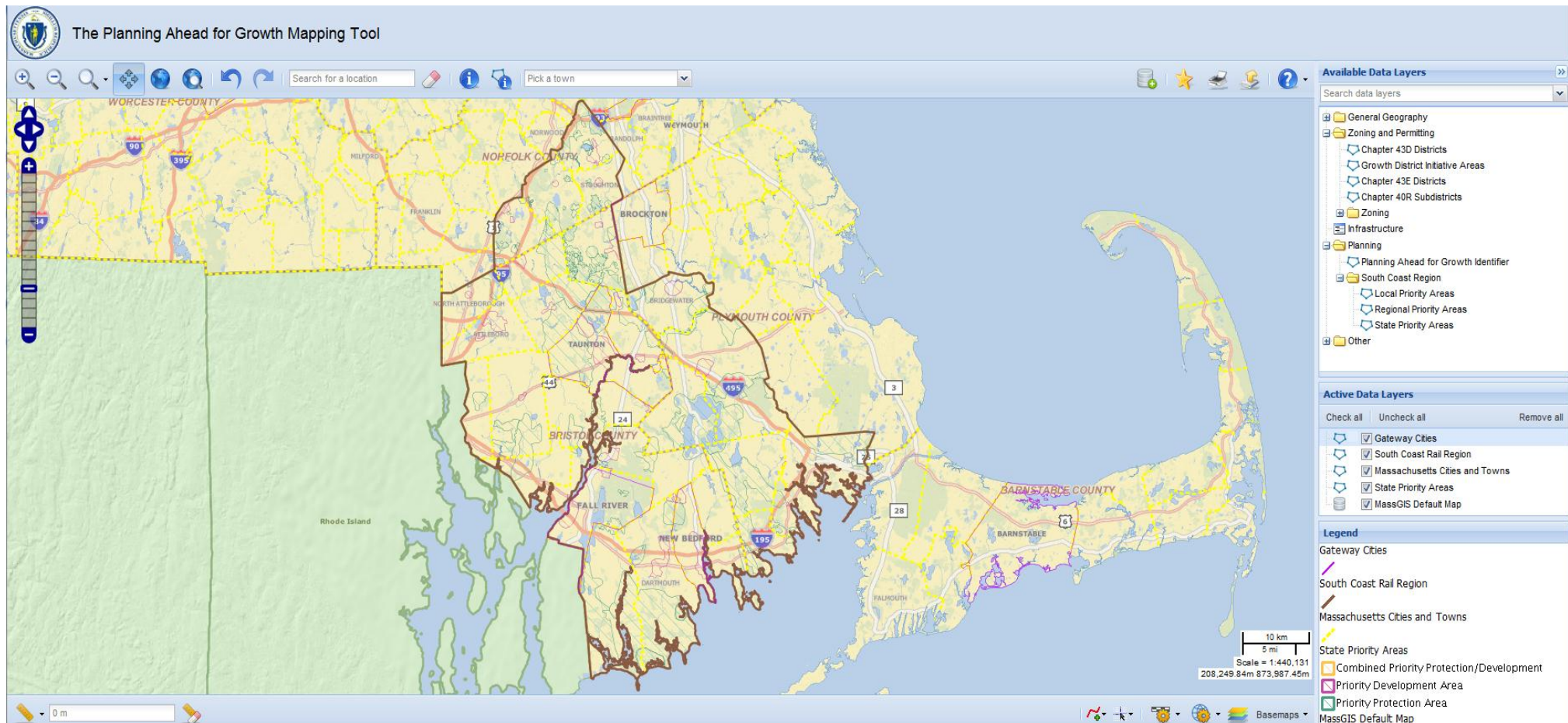


The Planning Ahead For Growth Online Mapping Tool



Patrick-Murray Administration

The Executive Office of Housing and Economic Development and MassGIS



Questions & Comments? Please contact Jessica Casey, Director of Policy Development & Implementation
at Jessica.Casey@state.ma.us or 617-788-3628

Getting Started

1. Copy and paste the following URL into the web browser:
http://maps.massgis.state.ma.us/map_ol/eohed_mapping.php

The Planning Ahead for Growth Mapping Tool

Tools

Map View

Available Data Layers

- General Geography
- Zoning and Permitting
 - Chapter 43D Districts
 - Growth District Initiative Areas
 - Chapter 43E Districts
 - Chapter 40R Subdistricts
- Zoning
- Infrastructure
- Planning
 - Planning Ahead for Growth Identifier
 - South Coast Region
 - Local Priority Areas
 - Regional Priority Areas
 - State Priority Areas
- Other

Active Data Layers

Check all | Uncheck all | Remove all

- ☒ Gateway Cities
- ☒ South Coast Rail Region
- ☒ Massachusetts Cities and Towns
- ☒ State Priority Areas
- ☒ MassGIS Default Map

Legend

- Gateway Cities
- South Coast Rail Region
- Massachusetts Cities and Towns
- State Priority Areas
 - Combined Priority Protection/Development
 - Priority Development Area
 - Priority Protection Area
- MassGIS Default Map

Tools

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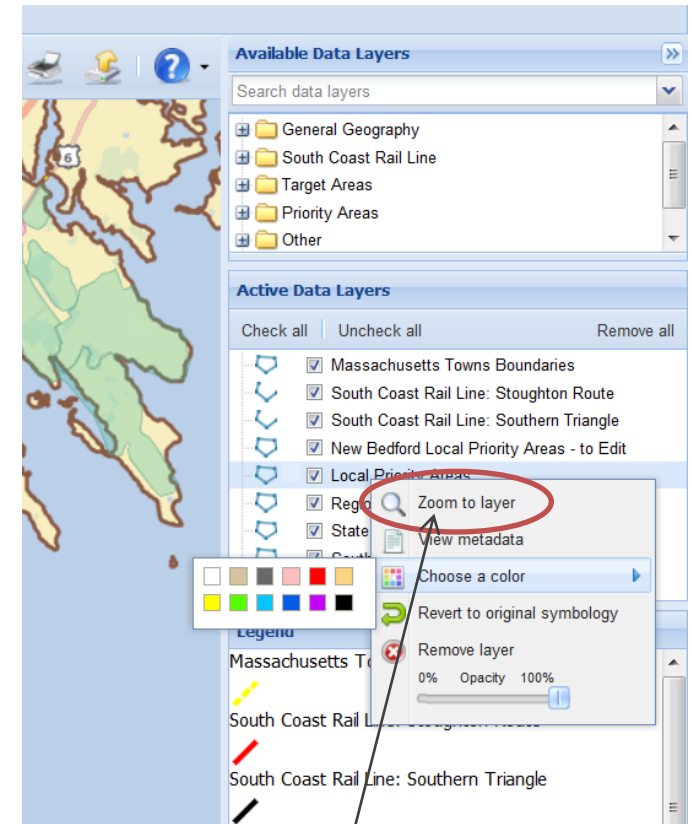
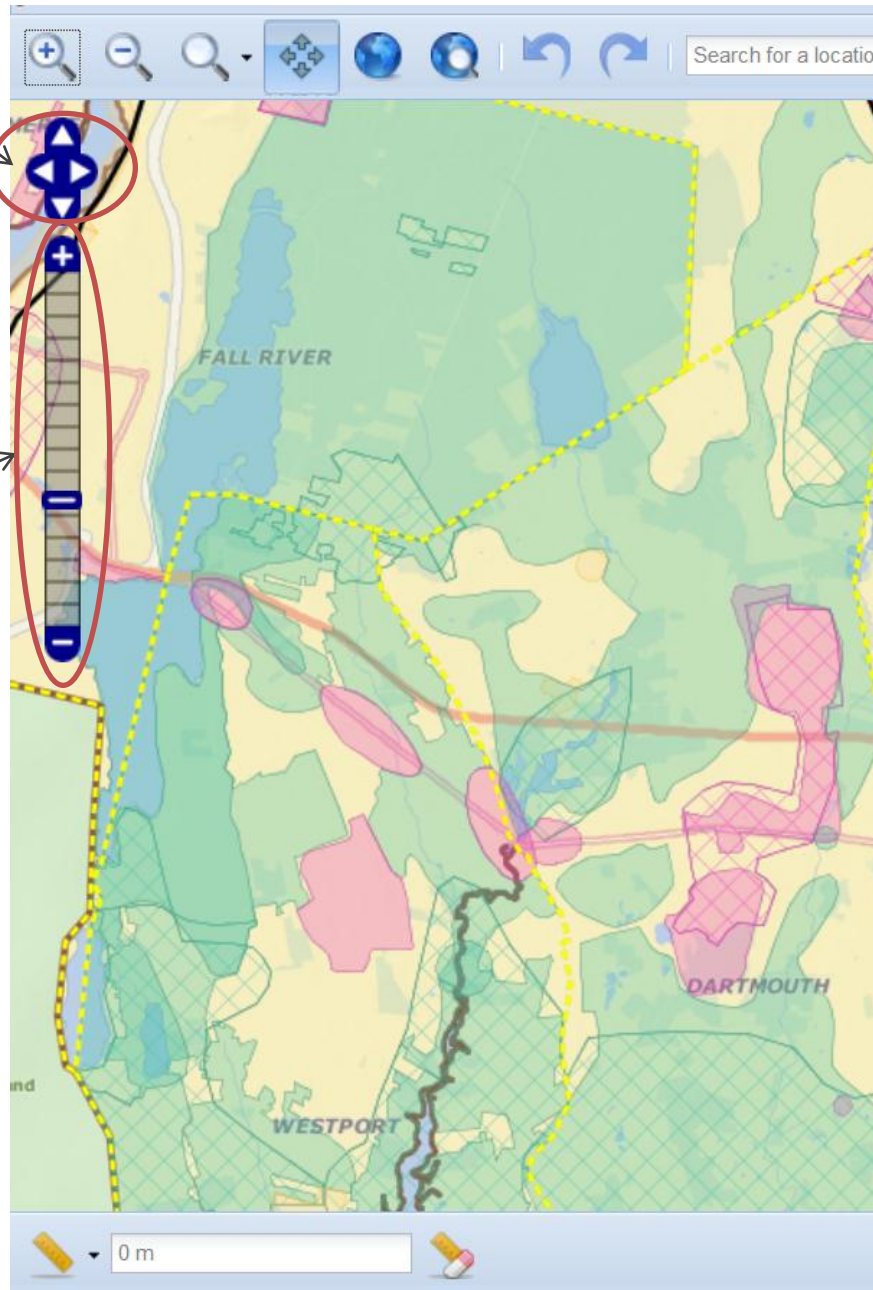
10 km
5 mi
Scale = 1:453,489
307,748.24m 819,086.34m

Basemaps

Navigating the Map

The arrows may be used to pan the map. Click an arrow to pan the map north, south, east, or west.

The zoom slider may be used to zoom in or out on the map. Click the plus sign to zoom in one level on the center of the map or the minus sign to zoom out. To zoom in or out multiple zoom levels, drag the zoom slider up or down, and release the mouse button at the desired zoom level.



To zoom to the extent of a data layer, right-click the data layer name in the “Active Data Layers” window and select “Zoom to layer.”

Drawing on the map – 5 easy steps

1. Add the “Planning Ahead for Growth Identifier” layer to the default map. This can be done by expanding the “Planning” tab in the available data layer section and double clicking on the “Planning Ahead for Growth Identifier” layer. You may see other areas or drawings that have been previously added to the map. These will not impact your ability to draw on the map. If you wish to delete or edit existing areas or drawings on the map, please view the “Editing, Moving or Deleting existing areas and drawings on the map” instructions on page 5.
2. Click the “Draw New Feature” tool. Select the “Planning Ahead for Growth Identifier” layer (See Diagram 1).
3. Click on the map to start drawing the feature. Click once to start drawing, click once to change directions, double click to complete the drawing (See Diagram 2).
4. If you wish, you can add a name to the area or drawing that you have added to the map. To do this, double click the empty field beside “Name” and type the name that you would like associated with the area.
5. Click Save. The new area or drawing will automatically appear on the map as a red hatched line (See Diagram 3)

NOTE: If you have having difficulties drawing on the map check that:

- The “Planning Ahead for Growth Identifier” layer has been added to the default map
- The “Draw New Feature” tool has been click on and the “Planning Ahead for Growth Identifier layer has been selected (as shown below – with the blue dot in Diagram 1)

Diagram 1: Step 2

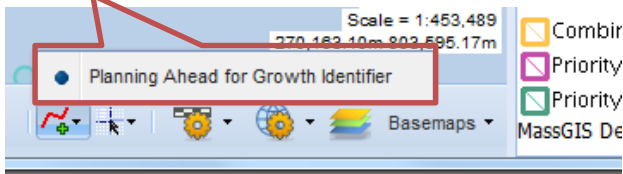


Diagram 2: Step 3



Diagram 3: Step 6



Editing, Moving or Deleting existing areas and drawings on the map – 4 easy steps

1. Add the “Planning Ahead for Growth Identifier” layer to the default map. This can be done by expanding the “Planning” tab in the available data layer section and double clicking on the “Planning Ahead for Growth Identifier” layer. If you wish to add new areas or drawings on the map, please view the “Drawing on the map” instructions on page 4.
2. Click the “Edit Existing Feature” tool. Select the “Planning Ahead for Growth Identifier” layer (See Diagram 1).
3. Select the area or drawing that you would like to edit by drawing a box over (or selecting) the area. Once selected, the area or drawing, will turn orange. Click the orange area to finalize the selection. The selected feature will turn blue and have orange vertices.
4. Once selected, you may move the feature, change its shape or delete it. To move the area or drawing, click on the vertex (orange dot) closest to the center of the feature and drag. You should see the blue feature with orange vertices move, while the original feature stays. If you click “save” the original feature will disappear. To reshape the area or drawing, click on a vertex (orange dot) and drag it. You will see the blue feature change shape. Click “Save” to keep the changes. To delete the area or shape, click the “Delete” button (See Diagram 2).

Diagram 1: Step 2

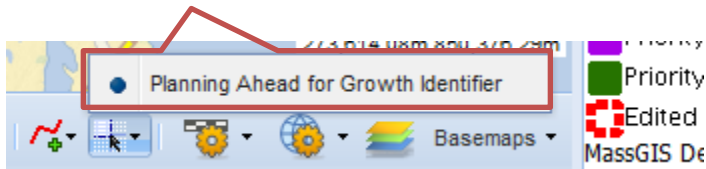
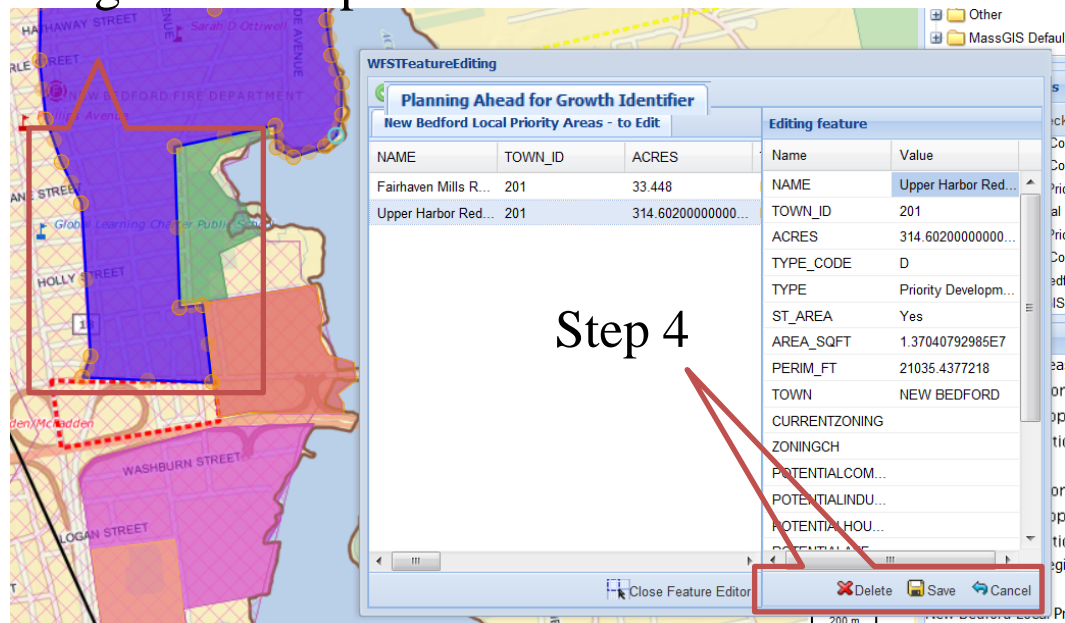
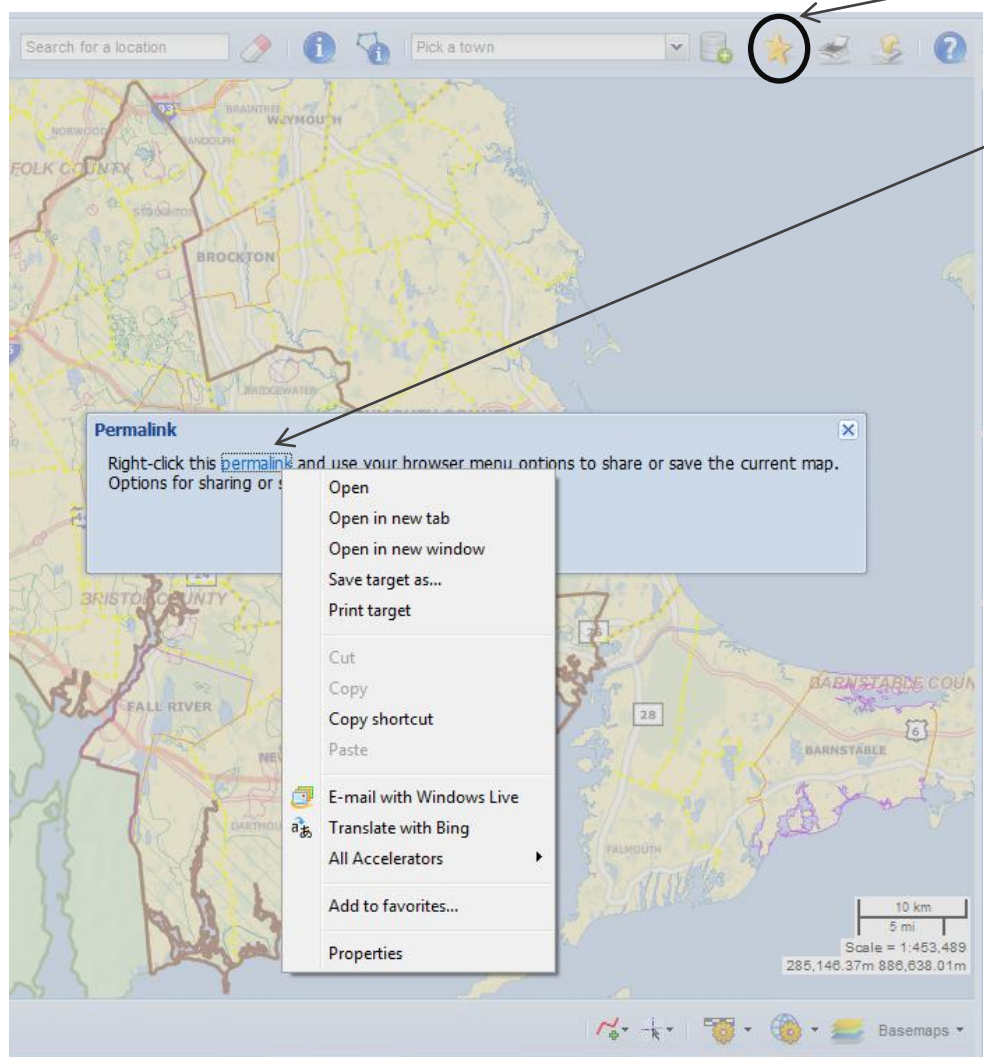


Diagram 2: Step 3



Bookmarking/Sharing a Map



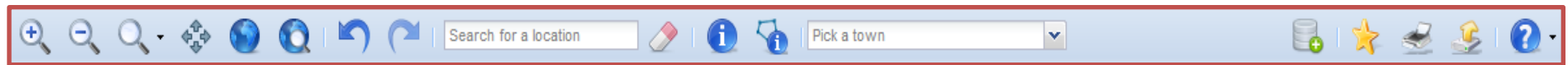
The screenshot shows a web map application interface. At the top, there is a search bar and a toolbar. A yellow star icon, representing the 'Permalink' tool, is circled in the toolbar. A context menu is open over the star icon, showing options for sharing or saving the map. The menu includes options like 'Open', 'Open in new tab', 'Open in new window', 'Save target as...', 'Print target', 'Cut', 'Copy', 'Copy shortcut', 'Paste', 'E-mail with Windows Live', 'Translate with Bing', 'All Accelerators', 'Add to favorites...', and 'Properties'. A blue box labeled 'Permalink' is also visible, containing text that reads: 'Right-click this permalink and use your browser menu options to share or save the current map. Options for sharing or saving vary among browsers. In Safari "Copy Link" will copy the URL to the clipboard. "Add Link to Bookmarks" will create a Safari bookmark. In Google Chrome "Copy link address" will copy the URL to the clipboard. "Open link in new window" will open the map in a new browser window. You can then click the bookmark icon (☆) in the address bar to save the permalink map as a bookmark. This URL may be saved as a bookmark in the web browser or shared with others in an email to launch the current map (includes the checked active data layers, along with their custom symbology and opacity settings, the map extent, the basemap, and the map units, but not external data layers). In Firefox "Copy Link Location" will copy the URL to the clipboard. "Bookmark This Link" will create a Firefox bookmark. In Internet Explorer "Copy shortcut" will copy the URL to the clipboard. "Add to favorites" will create an Internet Explorer favorite.'


1. To create a bookmark to launch the application with the current map settings (e.g., data layers, extent, etc.) enabled, click the "Permalink" tool.
2. Right-click the blue "permalink" and see the options. Options for sharing or saving vary among browsers. In **Safari** "Copy Link" will copy the URL to the clipboard. "Add Link to Bookmarks" will create a Safari bookmark. In **Google Chrome** "Copy link address" will copy the URL to the clipboard. "Open link in new window" will open the map in a new browser window. You can then click the bookmark icon (☆) in the address bar to save the permalink map as a bookmark. This URL may be saved as a bookmark in the web browser or shared with others in an email to launch the current map (includes the checked active data layers, along with their custom symbology and opacity settings, the map extent, the basemap, and the map units, but not external data layers). In **Firefox** "Copy Link Location" will copy the URL to the clipboard. "Bookmark This Link" will create a Firefox bookmark. In **Internet Explorer** "Copy shortcut" will copy the URL to the clipboard. "Add to favorites" will create an Internet Explorer favorite.


Please note: Some software programs, such as Microsoft Outlook, limit the number of characters allowed in a URL. If the permalink URL exceeds the maximum allowed length, the link will not open automatically when clicked. Copy and paste the URL into a web browser to open it.


Other useful information to help
with Navigation


Tools





 **Zoom in.** Click this button then click on the map to zoom in to an area, or click on the map, hold down the mouse button, and drag to draw a box to zoom in to that area of interest. The box will be outlined in red as you draw it.


 **Zoom out.** Click this button then click on the map to see approximately twice as much area, or click on the map, hold down the mouse button, and drag to draw a box to zoom out from that box. The box will be outlined in red as you draw it.


 **Zoom to scale.** Click this button to view a drop-down menu. Click one of the listed common map scales, or to zoom to an exact scale, enter a scale value (e.g., 7,500) into the “Custom scale” box. Press Enter to zoom to that scale. This tool is only available in the custom basemap.

 **Pan.** Click this button then click on the map, hold down the mouse button, and drag to recenter the map.


 **Zoom to initial extent.** Click this button to zoom to the original map extent provided when MORIS is first opened.


 **Zoom to full extent of active data layers.** Click this button to zoom to the extent of all the active data layers that are checked.


 **Go back to previous extent.** Click this button to go back to the previous map extent.

 **Go to next extent.** Click this button to go forward to the next map extent.


Search for a location. Type an address or location into the box and press Enter to zoom to a location. This location feature is provided by Microsoft Bing.


 **Clear location.** Click this button to clear the location search results (a blue balloon or blue rectangle) from the map.


 **Identify features by clicking a point or drawing a box.** Click this button then click on the map to identify features of active data layers that intersect the location you clicked, or click on the map, hold down the mouse button and drag to draw a box to identify features of active data layers located within or overlapping the box. The box will appear red as you draw it. The identify results will appear in a pop-up window.


 **Identify features by drawing a polygon.** Click this button then click on the map to draw vertices of a polygon, and double-click to finish drawing the polygon to identify features of active data layers located within or overlapping the polygon. The polygon will appear red as you draw it. The identify results will appear in a pop-up window.


Pick a town. Type a town name into the box and press Enter or hit the down arrow and select a town name from the drop down list to zoom to that town. This town location feature is provided by Microsoft Bing.

 **Add data layers from external sources.** Click this button to select an external data source to view its available data layers. These layers can be added to your map for display only. You will not be able to use the identify, permalink, print or export tools with data layers from external sources, nor will you be able to view their metadata or change their symbology.

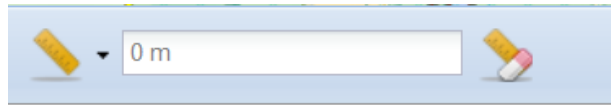
 **Make permalink.** Click this button to make a permalink for the map. Right-click the blue “permalink” and copy and save it as a bookmark to launch the MORIS application with the current map settings (data layers, extent, etc.) enabled.


 **Print or save your map and legend.** Press this button to print or save your map containing active data layers and a legend. After clicking this button, enter a title for the map and then press “OK”. This will assemble a map and legend which you can save as a picture or print out. Note that if you would like to print or save a map with the base map and external data layers, use the print option in your web browser or capture a screenshot of the map.


 **Launch the data export wizard.** Click this button to export data into other file formats.


 **Help.** Click this button to view a drop-down menu. Click “Help HTML” to view the user guide in HTML. Click “Help PDF” to view a PDF document of the user guide. Click “About the Planning Ahead For Growth Mapping Tool” to learn about the making of this data viewer.


Tools (continued)





 **Measure by length or area.** Click this button to view the measure menu. Click “**By length**” to measure the length of a line, click on the map to draw vertices of the line, and double-click to finish drawing the line. Click “**By area**” to measure the area of a polygon, click on the map to draw vertices of the polygon, and double-click to finish drawing the polygon. Move the mouse cursor over “**Units**” to view a menu of measurement units options and click one of the listed units to select that unit of measurement.



 **Clear measurement.** Click this tool to clear the measured line or polygon from the map and to clear the distance or area from the measurement results box.

 **Add (Draw) Tool.** Click this button to view a menu of data layers that may be edited. Select one of the listed data layers to which to add a feature and click on the map to start drawing the feature. If drawing a point feature, click once on the map to draw the new feature. If drawing a line or polygon feature, click more than once on the map to mark out the vertices of your line or polygon and double-click to finish drawing. Once you have finished drawing your new feature, the attribute editing window will appear. Enter values for the attribute fields and click “Save.”

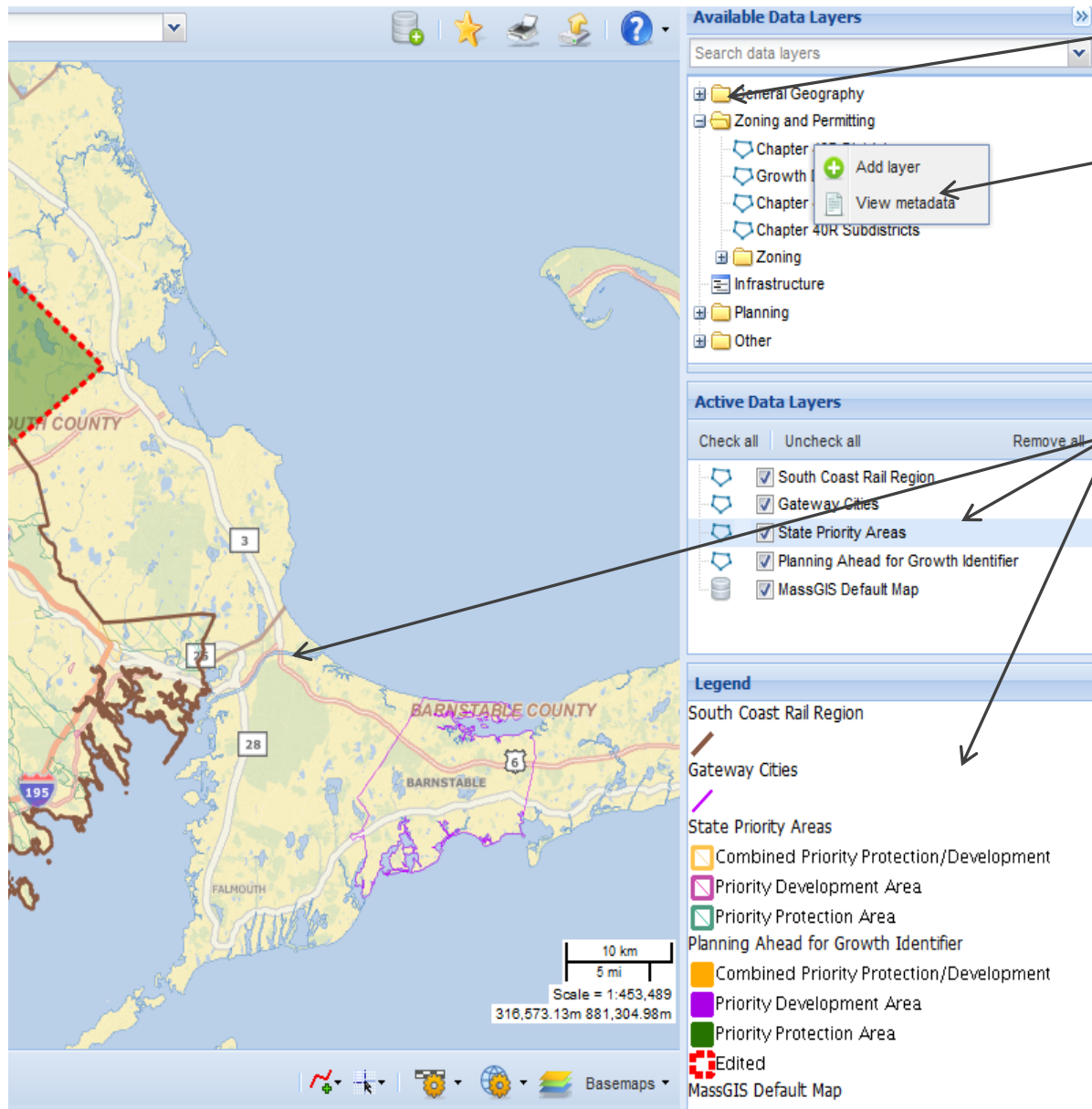
 **Edit Tool.** Click this button to view a menu of data layers that may be edited. Select one of the listed data layers to edit from the menu. Draw a box on the map to select a feature to edit. If more than one feature was selected, choose one feature within the attribute editing window. You may move the feature, change its shape, or change its attributes. Once you have finished editing the feature, the attribute editing window will appear. Change values for the attribute fields and click “Save.”

 **Scale settings.** Click this drop down menu and click the checkboxes on or off to show or hide the coordinates, scale bar, and scale ratio.

 **Select map units.** Click this drop down menu to change mapping units. The default map unit is “MA State Plane meters”.

 **Basemaps**  **Select base map or change base map opacity.** Click this drop down menu to change the base (background) map. Click the horizontal slider at the bottom of this drop down menu after changing the background map to change the contrast/opacity of the background map. The default base map is the “MassGIS Default Map” which can be found in the “Available Data Layers” window in the “General Geography” folder.

Adding Data Layers to The Map Viewer

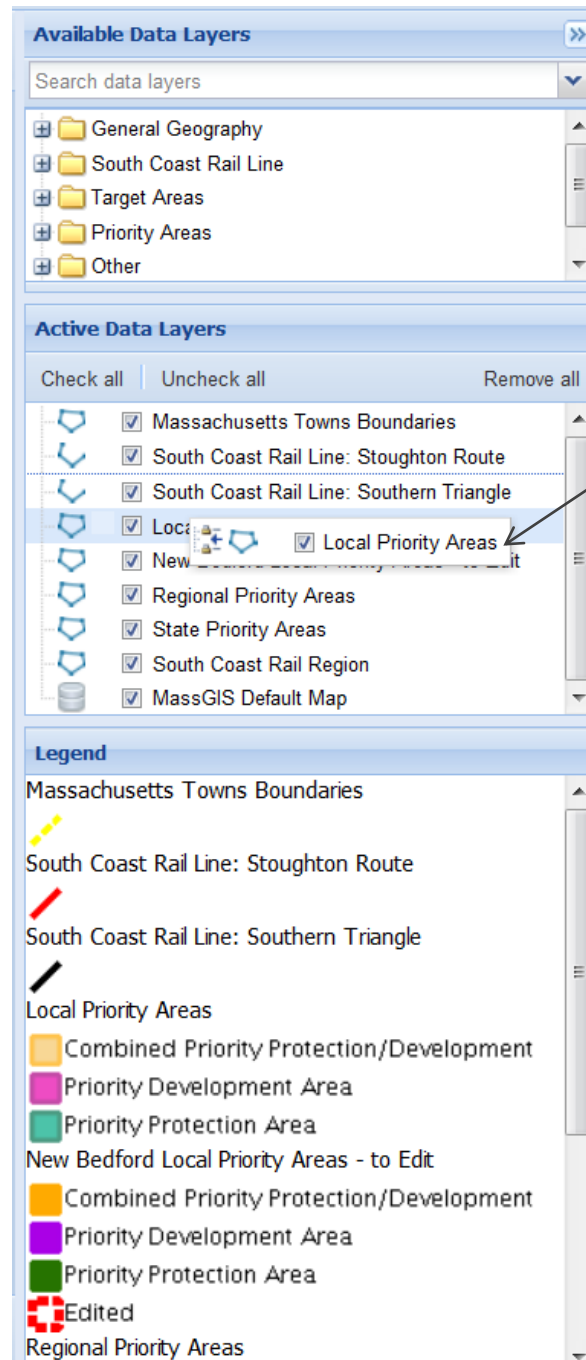


1. Browse folders in the “Available Data Layers” window for data layers.
2. Click a data layer name to add it to the map, or right-click a data layer name and select “Add layer.” To add a folder of data layers, right-click a folder name and select “Add folder.” Only folders at the bottom of the folder hierarchy may be added.
3. The data layer is drawn on the map. The data layer name will appear in the “Active Data Layers” window and the legend of the data layer will be added to the “Legend” window.

Please note: If there is an error drawing a data layer, the data layer’s icon in the “Active Data Layers” window will have a red exclamation point. This red exclamation point indicates that the data layer is currently unavailable; this may be due to an internet connection or a web services problem. Changing the map extent (e.g., panning), adding data layers, etc., will cause the data link to be refreshed. If this connection is restored, the red exclamation point will go away.

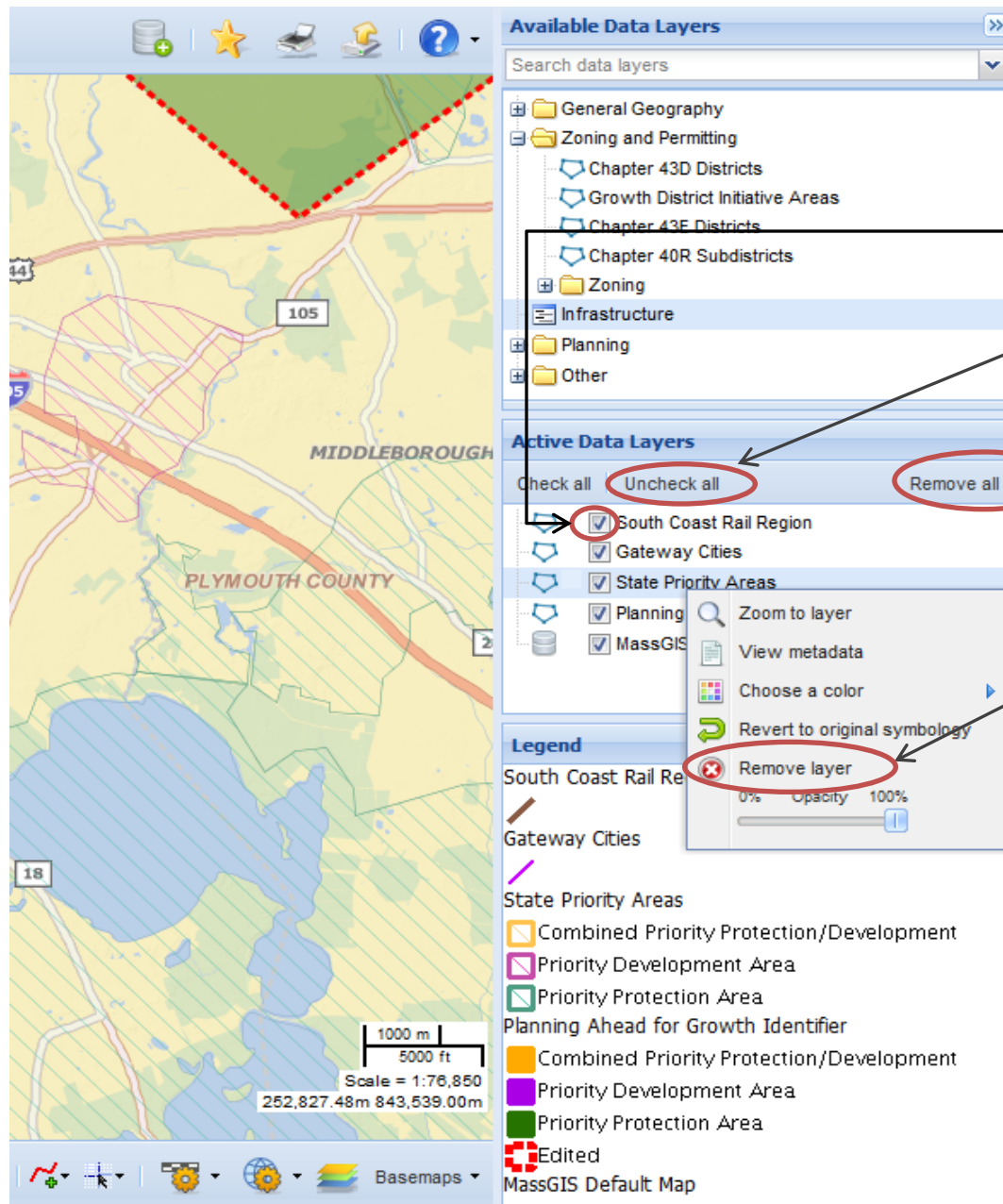


Reordering Data Layers in The Map Viewer



Data layers are drawn from the bottom to the top of the “Active Data Layers” list. To reorder the data layers, click on a data layer name in the “Active Data Layers” window, hold down the mouse button, and drag the data layer name up or down in the list.

Removing Data Layers From The Map Viewer



To temporarily turn a data layer off, uncheck the box next to the data layer name in the “Active Data Layers” window. The “Uncheck all” button may be clicked to turn off all the active data layers. The legends of unchecked data layers will be removed from the “Legend” window.

To remove a data layer, right-click the data layer name in the “Active Data Layers” window and select “Remove layer.” To remove more than one data layer, hold the Ctrl key on your keyboard to highlight multiple rows, right-click, and select “Remove layer.” The “Remove all” button may also be clicked to remove all the active data layers.

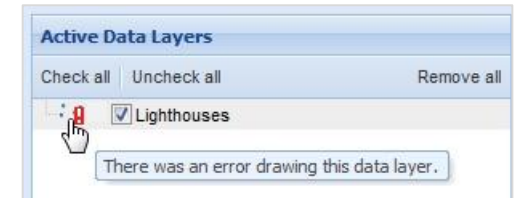
Trouble Shooting & Background Information

Troubleshooting

If the map does not initially load in Internet Explorer, go to the “Tools” menu and click “Internet Options.” Click on the “Security” tab and click the button “Default level.” Click the “Apply” button and the “OK” button and then reload the MORIS page.

Errors Drawing Data Layers

If there is an error drawing a data layer, the data layer’s icon in the “Active Data Layers” window will have a red exclamation point. This red exclamation point indicates that the data layer is currently unavailable; this may be due to an internet connection or a web services problem. Changing the map extent (e.g., panning), adding data layers, etc., will cause the data link to be refreshed. If this connection is restored, the red exclamation point will go away.



What do I need to run The Planning Ahead For Growth Mapping Tool?

The Planning Ahead For Growth Mapping Tool is run through a web browser. At this time, the application fully works in Google Chrome, Internet Explorer, Mozilla Firefox, and Safari. The latest versions of these browsers are recommended. Currently Google Chrome 16, Internet Explorer 9, Mozilla Firefox 9, and Safari 5 have been thoroughly tested, but the application also works in older versions of these browsers.